

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/879,841	06/12/2001	Alexander S. Podkolzin	L13.12-0141/00-684 3671		
7590 06/23/2004			EXAMINER		
Leo J. Peters			DO, THUAN V		
LSI LOGIC CO M/S D-106	ORPORATION	ART UNIT	PAPER NUMBER		
1551 McCarthy	y Boulevard	2825			
Milpitas, CA 95035			DATE MAILED: 06/23/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application I	Vo.	Applicant(s)	<i>GIF</i>			
Office Action Summary		09/879,841		PODKOLZIN ET AL.				
		Examiner		Art Unit				
		Thuan Do		2825				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1)⊠	Responsive to communication(s) filed or	n <u>12 June 20</u> 01.						
2a)□	This action is FINAL . 2b) This action is non-final.							
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
5)□ 6)⊠ 7)⊠	 4) Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1,10 and 19 is/are rejected. 7) Claim(s) 2-9,11-18 and 20 is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 							
Application Papers								
9)[The specification is objected to by the Ex	aminer.						
10)⊠ The drawing(s) filed on <u>12 June 2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.								
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11)⊠	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119								
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 								
Attachmen								
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date								
2) Notice of Draisperson's Patent Drawing Review (PTO-946) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152) 6) Other:								

Art Unit: 2825

DETAILED ACTION

1. This office action is responsive to application filed on 06/12/01. Claims 1-20 are pending in this office action.

Oaths

The signatures of inventors are missing. A copy of inventor signatures is requested in the next response.

Claim objections

Claim 1, the terms "identities", "resynthesis window" and "a predetermined depth of critical variable" are unclear to what they mean;

Claim 2, the term "most frequently" is not clear in mining.

Clarification or correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

- (e) the invention was described in-
- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).
- 2. Claims 1,10 and 19 are rejected under 35 U.S.C. 102(e) as being unpatentable over Kaufman et al. Pat. No. 6591407.

Regarding claim 1: Kaufman teaches a process comprising:

a) generating a plurality of identities based on logic operations and library cells in technology basis (col. 2, lines 53-67);

Art Unit: 2825

b) creating a resynthesis window having less than a predetermined depth of critical variables (col. 19, lines 19-49);

- c) transforming logic equations from the resynthesis window using the identities (col. 2, lines 19-31); and
 - d) optimizing the resynthesis window area (col. 2, lines 19-31).

Regarding claims 10 and 19: These claims teach the similar features of claim 1 and rejected in similar manner.

Allowable Subject Matter

Claims 2-9,11-18 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The reason for allowance is that the prior art of record fails to teach the combination of dependent claims and all other features of corresponding independent claims.

CONTACT INFORMATION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuan Do whose telephone number is 571-272-1891. The examiner can normally be reached on Monday-Friday 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Smith can be reached on 571-272-1907. The fax phone numbers for the organization where this application or proceeding is assigned are 703 305-3431 for regular communications and 703-305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0596.

Thuan Do Patent examiner

6/21/04